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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/543,043	07/21/2005	Jeffrey Allen Cooper	PU030313	3936
24498	7590	03/01/2010		
Robert D. Shedd, Patent Operations				
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EXAMINER				
CZEKAJ, DAVID J				
ART UNIT		PAPER NUMBER		
2621				
MAIL DATE		DELIVERY MODE		
03/01/2010		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/543,043

**Applicant(s)**

COOPER ET AL.

**Examiner**

DAVID CZEKAJ

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 July 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/CD)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_
- Paper No(s)/Mail Date See Continuation Sheet

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :12/7/09, 8/8/08, 1/29/07, 10/30/06, 7/21/05.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-2, 6-8, 11-12, and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Stephens et al. (6304609), (hereinafter referred to as "Stephens").

Regarding claim 1, Stephens discloses an apparatus that relates to a communication system (Stephens: column 1, lines 9-10). This apparatus comprises "encoding a first signal" (Stephens: figure 7, item 30A, wherein the encoder encodes the first signal), "encoding a second signal" (Stephens: figure 7, item 30B), "specifying a time delay period" (Stephens: figure 5, item 120, wherein the time delay is introduced by the delaying means), "generating a composite signal comprising the first and second signals" (Stephens: figure 7, item 172, wherein the multiplexer combines the signals), and "if an error is detected, decode the second encoded signal, otherwise decode the first signal" (Stephens: column 14, lines 51-67, wherein the error is the bit error rate).

Regarding claims 2 and 12, Stephens discloses "generating a signal carrying data representing the time delay period" (Stephens: figure 5, item

120, wherein the time delay is the delaying means), "extracting the first and second encoded signals and time delay" (Stephens: figure 7, wherein the selector extracts the signal), and "delaying the extracted second signal, whereby the signals are realigned in time" (Stephens: figure 5, wherein the deinterleaver delays the signals).

Regarding claim 6, Stephens discloses "the time delay period representative data comprises the time duration of the time delay period" (Stephens: column 11, lines 8-26, wherein the time delay period is the time delay).

Regarding claim 7, Stephens discloses "the time delay period representative data comprises a number representing a number of time intervals of predetermined length" (Stephens: column 11, lines 8-9, wherein the predetermined length is twice the channel correlation time).

Regarding claims 8 and 16, Stephens discloses "encoding the first content using an encoding technique backward compatible" (Stephens: figure 7, wherein the backward compatible encoder is the high quality encoder) and "encoding the second signal using a relatively robust technique" (Stephens: figure 7, wherein the robust technique is the low quality encoder).

Regarding claim 11, note the examiners rejection for claims 1-2.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 3-5, 9-10, 13-15, and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stephens et al. (6304609), (hereinafter referred to as "Stephens") in view of Thomas et al. (2002/0047902), (hereinafter referred to as "Thomas").

Regarding claims 3-4 and 13-14, note the examiners rejection for claim 1, and in addition, claims 3-4 and 13-14 differ from claim 1 in that claims 3-4 and 13-14 further require generating a data table containing information related to the first and second signals. Thomas teaches that data tables can be useful for monitoring and diagnosing/troubleshooting streams (Thomas: paragraphs 0062, 0063, 0064, and 0065, wherein the data tables are the PMT tables represented by the letters AN and M). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to take the apparatus disclosed by Stephens and add the program map tables taught by Thomas in order to obtain an apparatus that operates more efficiently by being able to successfully monitor and troubleshoot errors occurring in streams.

Regarding claims 5 and 15, Thomas discloses "the data table is a PSIP-VCT table" (Thomas: paragraph 0078).

Regarding claims 9, 17, and 19, Thomas discloses "encoding the signals using 8-VSB modulation" (Thomas: figure 8, items 824 and 826;

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paragraph 0167). Although not disclosed, it would have been obvious to use 2 or 4-VSB (Official Notice). Doing so would have been obvious in order to provide a wider range of encoding options.

Regarding claims 10 and 18, note the examiners rejection for claim 1, and in addition Thomas discloses "encoding using MPEG-2 packet format" (Thomas: paragraph 0149, wherein the packet format is indicated by the transport streams). Although not disclosed, it would have been obvious to encode according to JVT (Official Notice). Doing so would have been obvious in order to better help compress the data.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

US-7092442            08-2006            Zhang et al.

US-2002/0181581    12-2002            Birru et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID CZEKAJ whose telephone number is (571)272-7327. The examiner can normally be reached on Mon-Thurs and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on (571) 272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dave Czekaj/  
Primary Examiner, Art Unit 2621